In the Claims

1 (Currently Amended). A radio transceiver, comprising:

radio front end for receiving, amplifying and down-converting and filtering a radio frequency (RF) signal to produce a low frequency received signal;

analog-to-digital converter (ADC) operatively coupled to receive the low frequency received signal, the ADC producing a digital low frequency signal;

baseband processor coupled to receive and process the digital low frequency signal;

radar detection circuit coupled to receive the digital low frequency signal, wherein the radar detection circuit measures magnitude levels of received signals, rise time, fall time, and detects a received radar pulse pattern and produces a corresponding control signal indicating whether a radar signal has been detected to the baseband processor to inhibit wireless transmissions from the radio front end while the radar pulse pattern is being detected; and

wherein the baseband processor does not produce outgoing digital signals based on the control signal ~~whenever the control signal indicates that the radar signal has been received~~.

2 (Original). The radio transceiver of claim 1 wherein the radio front end includes a low noise amplifier (LNA) for amplifying the received RF signal and down-conversion circuitry for down-converting the received and amplified RF signals to produce a down-converted signal.

3 (Original). The radio transceiver of claim 2 wherein the down-converted signal comprises one of a low intermediate frequency (IF) or baseband signal.

4 (Original). The radio transceiver of claim 2 wherein the down-converted signal is produced to low pass filter circuitry for producing low pass filtered signals, wherein the low pass filtered signals are the low frequency signals produced to the analog-to-digital converter.

5 (Original). The radio transceiver of claim 2 wherein the down-converted signal is produced as I and Q channel signals.

6 (Original). The radio transceiver of claim 5 wherein the radar detection circuit receives I and Q channel digital low frequency signals.

7 (Original). The radio transceiver of claim 1 wherein the radar detection circuit measures signal magnitude rises above a plurality of thresholds, rise time from a first to a second threshold, time above the second threshold, and fall time from the second to the first threshold.

8 (Original). The radio transceiver of claim 7 wherein the radar detection circuit monitors at least one of a magnitude, a pulse width and timing and timing relationships of received pulses to determine whether a radar pulse has been received.

9 (Original). The radio transceiver of claim 8 wherein the radar detection circuit comprises a state machine for determining whether the received pulse has a specified characteristic of a radar pulse.

10 (Original). The radio transceiver of claim 8 wherein the control signal produced by the radar detection circuit is a binary signal that is set to a specified logic state whenever the radar signal is detected.

11 (Currently Amended). The radio transceiver of claim 1 wherein the control signal produced by the radar detection circuit includes threshold level and timing information wherein the baseband processor determines that a radar signal has been detected.

12 (Currently Amended). The radio transceiver of claim [[12]] 11 wherein logic within the baseband processor monitors at least one of the magnitude, the pulse width and the timing and timing relationships of received pulses to determine whether a radar pulse has been received.

13 (Original). The radio transceiver of claim 1 wherein the baseband processor determines whether the pulse is a radar pulse based upon pulse width.

14 (Original). The radio transceiver of claim 13 wherein the baseband processor determines that the pulse is not a radar pulse if the pulse width is less than a specified amount.

15 (Original). The radio transceiver of claim 13 wherein the baseband processor determines that the pulse is not a radar pulse if the pulse width is greater than a specified amount.

16 (Original). The radio transceiver of claim 13 wherein the baseband processor determines that the pulse is not a radar pulse if a period between pulses is not approximately constant.

17 (Original). A radio transceiver, comprising:

radio front end for receiving, amplifying and down converting and filtering a radio frequency (RF) signal to produce a low frequency received signal;

analog to digital converter operatively coupled to receive the low frequency received signal, the ADC producing a digital low frequency signal;

baseband processor coupled to receive and process the digital low frequency signal;

radar detection circuit coupled to receive the digital low frequency signal, wherein the radar detection circuit further includes:

multiplication circuitry for receiving and squaring a low frequency digital signal;

moving average filter coupled to selectively receive an output signal produced by the multiplication circuitry, the moving average filter producing a moving average filtered signal;

first conversion block for converting a magnitude of the moving average filtered signal into decibel values; and

a threshold comparison state machine coupled to receive an output of the first conversion block in decibel values, the threshold machine for measuring rise time, fall time, and magnitude levels of received signals and detects a received radar pulse pattern and produces a corresponding control signal indicating whether a radar signal has been detected to the baseband processor; and

wherein the processor is coupled to receives rise time, fall time, and magnitude levels of received signals from the threshold comparison state machine, and wherein the processor determines whether the radar signal has been received and, if so, inhibits transmissions on overlapping frequency bands.

18 (Original). The radio transceiver of claim 17 wherein the radar detection circuit further includes a second conversion block coupled to selectively receive the output signal produced by the multiplication circuitry, the second conversion block converting the magnitude of the moving average filtered signal into decibel values.

19 (Original). The radio transceiver of claim 18 wherein the radar detection circuit further includes a summing node for subtracting a receiver gain setting from the magnitude in decibel values of the output of the multiplication circuitry.

20 (Original). The radio transceiver of claim 19 wherein the moving average filter and the first conversion block are coupled serially in a first branch and the second conversion block and the summing node are coupled in a second branch and wherein logic selects between the first and second branch based upon whether a wireless local area network (WLAN) signal is being received.

21 (Original). The radio transceiver of claim 20 wherein the first branch is selected if the wireless LAN signal is being received and the second branch is selected if the wireless LAN signal is not being received.

22 - 32. (Canceled)